

Name _____

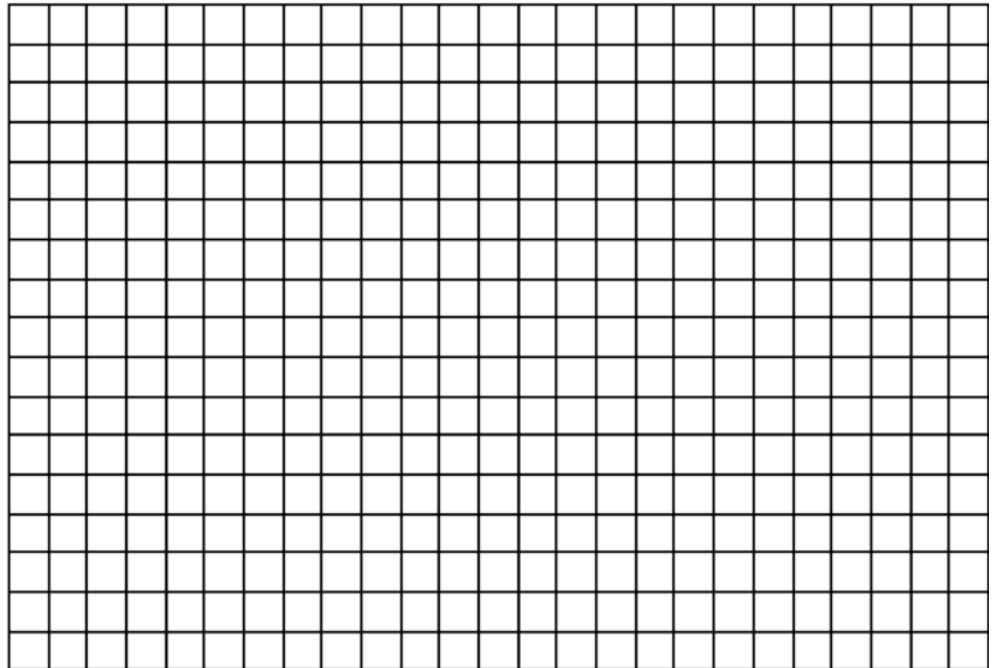
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Hour _____

Semester 1 Exam Review- Chapters 4 & 5**4.1 Coordinates and Scatter Plots**

1. The data below represents the weight and height of a male. Create a scatter plot to display this information. Use the horizontal axis to represent age and the vertical axis to represent weight.

Age	Height (in.)	Weight (lb)
5	50	78
10	60	112
15	67	135
25	70	150



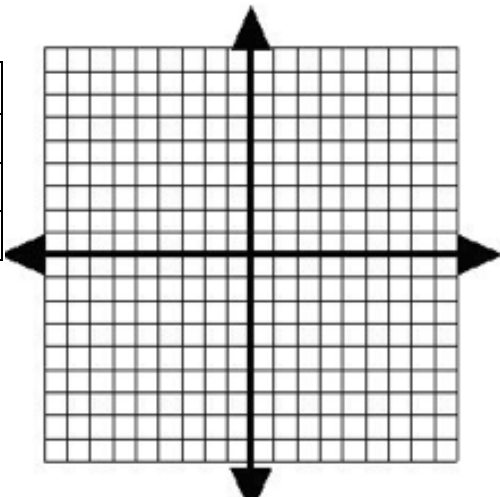
2. At age 13, the male was 63 in. tall. Use your scatter plot from above to predict his weight at age 13.

4.2 Graphing Linear Equations

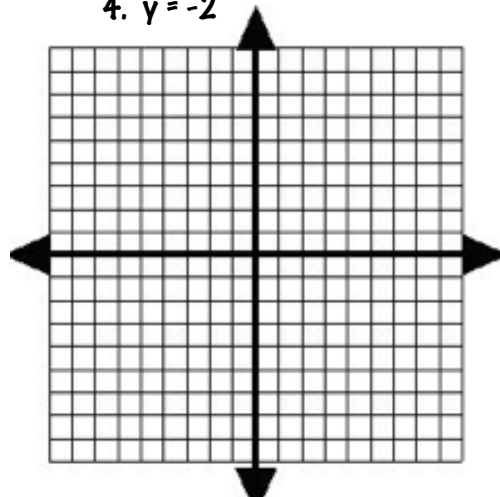
Use a table of values to graph the following equations.

3. $x = 7$

x	y



4. $y = -2$



x	y

5. Rewrite the following equation in function form: $8y + 4x = 30$

4.3 Quick Graphs Using Intercepts

6. State the x- and y- intercepts for the following equation: $2x + 5y = -10$

4.4 The Slope of a Line

Find the slope of the line passing through the given points.

7. $(-4, 2)$ $(4, -3)$

8. $(7, 5)$ $(7, -3)$

9. $(-5, 4)$ $(3, 4)$

4.6 Quick Graphs Using Slope-Intercept Form

Graph the following equations using slope-intercept form.

10. $6x + 5y = 10$

11. $y = -5x$

12. $y = \frac{2}{3}x - 9$

$m =$

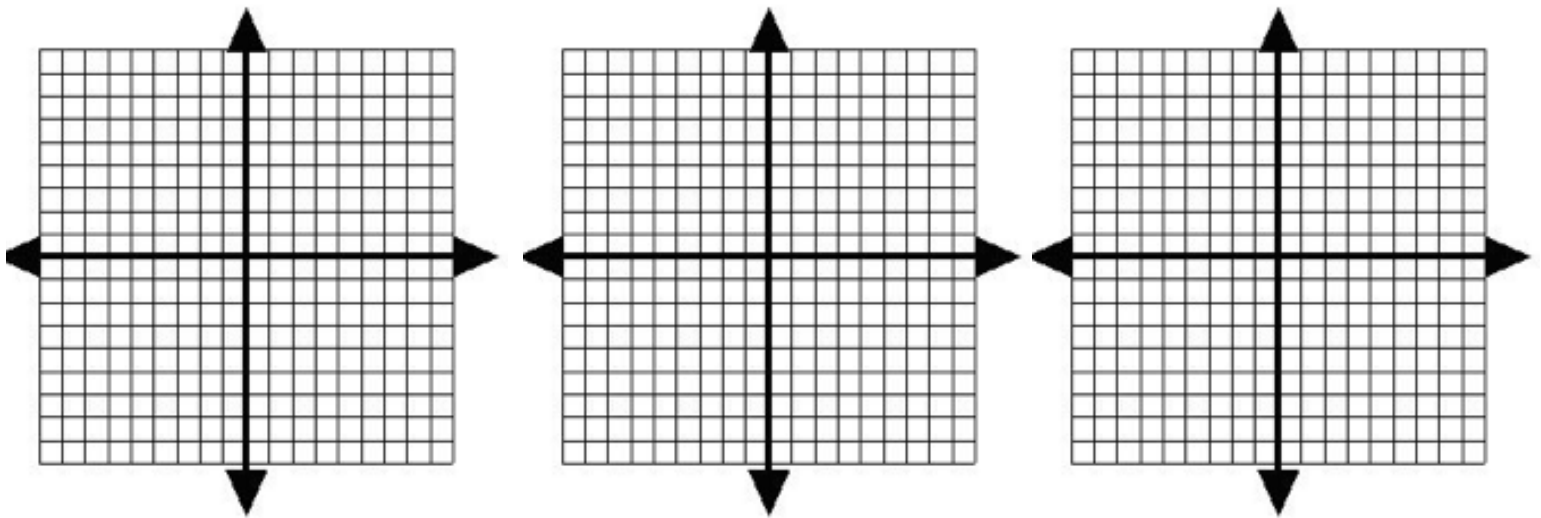
$b =$

$m =$

$b =$

$m =$

$b =$



4.8 Functions and Relations

13. Decide whether the relation is a function and EXPLAIN your answer. If it is a function, give the domain and range.

x	y
0	5
1	6
2	7
3	8

14. The miles traveled (in hours) by a runner can be modeled by the function $f(t) = 8t$, where t is the time in hours. Find the distance run in 3 hours and 15 minutes.

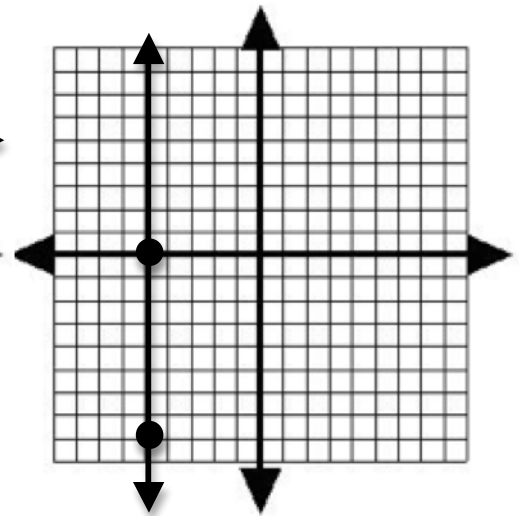
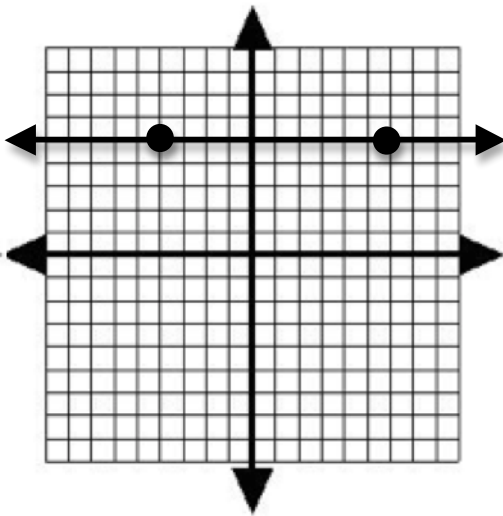
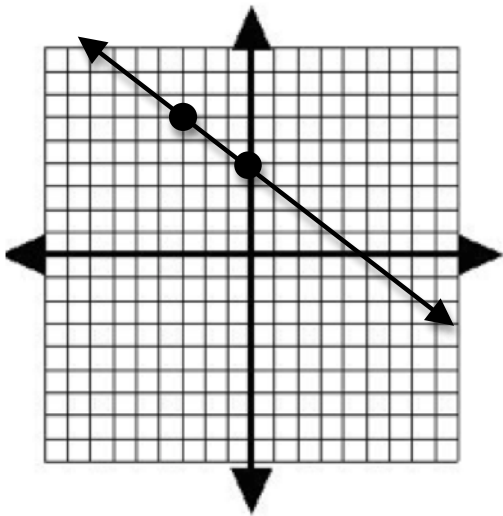
5.1 Writing Linear Equations in Slope-Intercept Form

Write the equation of the following lines.

15.

16.

17.



5.2 Writing Equations Given the Slope and a Point

Write the equation of a line in slope-intercept form that passes through the point and has the given slope.

18. $(-22, 2)$, $m = -2$

19. $(4, -6)$, $m = 0$

20. x-intercept = 8, $m = \frac{1}{4}$

5.3 Writing Equations Given Two Points

Write the equation of a line in slope-intercept form that passes through the two given points.

21. $(5, 3)$ & $(4, -3)$

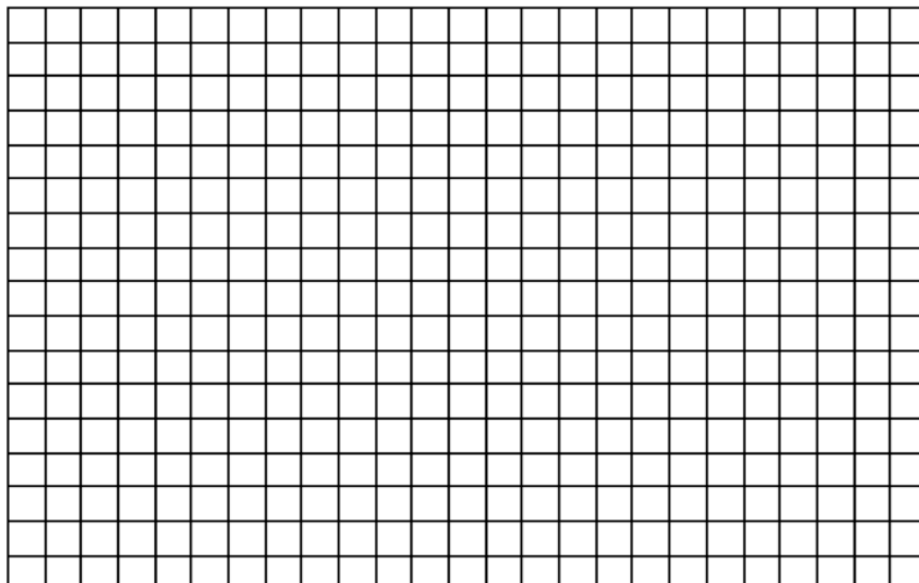
22. $(2, -9)$ & $(-3, -9)$

23. $(-12, 4)$ & $(-12, -6)$

5.4 Fitting a Line to Data

24. In the table below, x represents the number of weeks you worked at a summer job and y represents the balance in your savings account. Construct a scatter plot for this data.

x	1	2	3	4	5	6	7	8
y	100	175	225	360	375	400	450	475



25. Write an equation of the line that you think best fits the data in the scatter plot above.

5.6 The Standard Form of a Linear Equation

Write the given equations in standard form.

26. $3y + 6x + 18 = 0$

27. $y = -\frac{1}{3}x - 4$

FOR ADDITIONAL CHAPTER 4 and 5 REVIEW PLEASE REFER TO ANY OR ALL OF THE FOLLOWING:

- 📖 Your classroom notes and examples for chapter 4 and 5
- 📖 Chapter 5 Review on pages 324 - 326
- 📖 Corresponding book sections
- 📖 Chapter 5 Test on page 327
- 📖 Chapter 4 Review on pages 264 - 266
- 📖 Chapter 5 Extra Practice Problems on page 801
- 📖 Chapter 4 Test on page 267
- 📖 Chapter 4 Extra Practice Problems on page 800

STUDENTS CAN CHECK ANSWERS IN THE BACK OF THE BOOK. IF ANSWERS ARE NOT AVAILABLE IN THE BACK OF THE BOOK, STUDENTS ARE ENCOURAGED TO USE THE TEACHER BOOK TO CHECK ANSWERS BEFORE TAKING THE SEMESTER EXAM.